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Abstract

Polymers of intrinsic microporosity (PIMs) exhibit the inherent superior permeability over traditional commercial polymers, however, the relatively low selectivity restrict their broad application in gas separation. In this study, novel kinds of mixed matrix membranes (MMMs) combined covalent organic frameworks (COFs) and PIMs were prepared and utilized for improving the selectivity of carbon capture process. Covalent organic framework (SNW-1) was synthesized via Schiff base

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